PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Applicant	:	Keeler, Sr.
Serial No.	:	10/691,480
Filed	:	October 21, 2003
Title	:	METHOD FOR PACKAGING CRABMEAT
Conf. No.	:	5040
Docket	:	034-002
Examiner	:	Chawla
Art Unit	:	1781

Commissioner for Patents
Post Office Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF

This is an appeal from the rejections presented in the final Office action mailed on May 26, 2010. A notice of appeal was timely filed on November 26, 2010.

TABLE OF CONTENTS

Real Party in Interest:

Applicant, John Keeler, Sr., has assigned the present patent application to John Keeler & Co., Inc., which does business as Blue Star Food Products. A copy of the assignment document was recorded in the United States Patent and Trademark Office at Reel 014975, Frame 0066 on February 13, 2004. Therefore, John Keeler & Co., Inc. is the real party in interest.

Related Appeals and Interferences:

The present patent application was the subject of Appeal No. 2009-1587, which was decided by the Board on May 6, 2009. A copy of the Board's decision is provided in the related proceedings appendix.

The assignee and undersigned attorney are not aware of any other appeals or interferences that directly affect or will be directly affected by, or are related to or have a bearing on, the Board's decision in this pending appeal.

Status of Claims:

Claims 3–5, 7, 10, 12, 13, 15 and 18 stand finally rejected and are being appealed. Claims 1, 2, 6, 8, 9, 11, 14, 16, 17, 19 and 20 have been cancelled during prosecution.

Status of Amendments:

No amendments were presented after the mailing of the final Office action on May 26, 2010.

Summary of Claimed Subject Matter:

Traditionally, crabmeat packaged in airtight containers has been sterilized or frozen. (*Specification*, ¶ 2.) However, the sterilization and freezing processes alter the texture, taste and fresh characteristics of the crabmeat. (*Id.*)

The claims of the present patent application are directed to crabmeat packaged in flexible pouches with a predetermined volume of ambient air and then subjected to a pasteurization process. (*Id.* at ¶ 12.) The pasteurization process kills certain bacteria but allows the crabmeat to retain many of its original qualities, such as appearance, taste, texture, moisture, color and smell. (*Id.* at ¶ 14.) The predetermined volume of ambient air in the package retards the growth of aerobic and anaerobic bacterial growth, but not to the point at which spoilage (i.e., aerobic bacterial growth) becomes undetectable. (*Id.* at ¶ 13.)

Independent claim 10 is directed to a packaged crabmeat product including a sealed flexible pouch. (*Id.* at ¶ 17.) A volume of crabmeat is positioned in the sealed flexible pouch. (*Id.* at ¶ 16.) Additionally, a volume of ambient air is positioned in the flexible pouch. (*Id.* at ¶ 18.) The sealed flexible pouch is pasteurized. (*Id.* at ¶¶ 23–24.) The volume of ambient air in the sealed flexible pouch provides an ambient air to crabmeat ratio of about 13 to 20 percent by volume such that anaerobic bacterial growth is prevented. (*Id.* at ¶¶ 13 and 20.)

Independent claim 18 is directed to a method for packaging crabmeat. (*Id.* at ¶ 16.) The first step includes providing a flexible pouch. (*Id.* at ¶ 17.) The second step includes placing a volume of crabmeat into the flexible pouch. (*Id.* at ¶ 16.) The third step includes controlling a volume of ambient air in the flexible pouch to obtain an ambient air to crabmeat ratio within the flexible pouch of about 13 to 20 percent by volume such that anaerobic bacterial growth within the flexible pouch is prevented. (*Id.* at ¶ 20.) The controlling step is performed after the crabmeat has been placed in the flexible pouch. (*Id.* at ¶ 16.) The fourth step includes sealing the flexible pouch to maintain the ambient air to crabmeat ratio within the flexible pouch. (*Id.* at ¶ 22.) The fifth step includes pasteurizing the flexible pouch after the sealing step. (*Id.* at ¶¶ 23–24.)

Grounds of Rejection to be Reviewed on Appeal:

1. Claims 3–5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,268,189 to Doerter ("Doerter"), in view of the combination of Peterson, M. E., et al., "Heat-Pasteurization Process for Inactivation of Nonproteolytic Types of Clostridium botulinum in Picked Dungeness Crabmeat," Journal of Food Protection 60(8) (1997): 928-934 ("Peterson'), U.S. Patent No. 2,546,428 to Byrd ("Byrd"), Air Liquide Canada, "Packaging and Preserving Fish and Sea Products" (Abstract Only) ("Air Liquide"), and U.S. Patent No. 4,840,805 to Sugisawa et al. ("Sugisawa").

2. Claims 3–5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Pub. No. 2002/0061412 to Ueyama et al. ("Ueyama") in view of the combination of Peterson, Air Liquide and Sugisawa.

3. Claims 3–5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over GB 2,343,611 to Left et al. ("Left") in view of the combination of Peterson, Air Liquide, Doerter and Sugisawa.

4. Claims 3–5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,852,486 to Walker et al. ("Walker") in view of the combination of Ueyama and Sugisawa.

Argument:

Claims 10 and 18 are the only pending independent claims. Claim 10 is directed to a packaged crabmeat product and claim 18 is directed to a method for packaging crabmeat. Claims 10 and 18 both require a volume of crabmeat and a volume of ambient air sealed in a flexible pouch such that the ratio of ambient air to crabmeat within the flexible pouch ranges from 13 to 20 percent by volume. Once pasteurized, the claimed ambient air to crabmeat ratio retards the growth of aerobic and anaerobic bacteria, but not to the point at which spoilage becomes undetectable.

Thus, the use of pasteurization combined with the claimed ambient air to crabmeat ratio provides a low-cost means for obtaining a safer product, while retaining crabmeat freshness qualities, such as appearance, taste, texture, moisture, color and smell.

1. Claims 3–5, 7, 10, 12, 13, 15 and 18 are not obvious over the combination of Doerter, Peterson, Byrd, Air Liquide and Sugisawa.

The Examiner contends that claims 3–5, 7, 10, 12, 13, 15 and 18 are obvious over the combination of Doerter, Peterson, Byrd, Air Liquide and Sugisawa. For the reasons outlined below, Applicant submits that a person having ordinary skill in the art would not apply the teachings of Sugisawa to crabmeat, let alone modify a flexible pouch containing crabmeat to include an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, the Examiner's rejections should be reversed.

Doerter discloses a process for packing shellfish, such as crab, in a container. Specifically, Doerter discloses a process including the steps of: (1) packing the shellfish in the container, (2) filling the container with a mixture of carrageenan and water such that "[t]he mixture fills the container and effectively forces any air from the container, leaving only shellfish and the carrageenan mixture" (*Doerter*, col. 3, ll. 8–10), (3) hermetically sealing the container, (4) sterilizing or pasteurizing the container and (5) cooling the container.

Thus, Doerter does not disclose an ambient air to crabmeat ratio of about 13 to 20 percent by volume. To the contrary, Doerter teaches using a mixture of carrageenan and water to "effectively [force] any air from the container, leaving only shellfish and the carrageenan mixture." (*Id.* at col. 3, 11. 8-10.) Therefore, Doerter encourages the complete

removal of ambient air from the package, thereby teaching away from the claimed packaged crabmeat product and packaging method.

Peterson discloses the concept of pasteurizing flexible pouches packed with Dungeness crabmeat. However, Peterson does not disclose or suggest an ambient air to crabmeat ratio within the flexible pouch of about 13 to 20 percent by volume.

Byrd discloses a method for packaging fresh shellfish in a container including the steps of: (1) packaging shellfish meat in the container, (2) sealing the container with a minimized amount of air therein, (3) heating the sealed container to 171 °F, (4) cooling the heated container and (5) refrigerating the container until consumed. Specifically, Byrd discloses that the containers packed with shellfish meat are "vacuumized by any known method, if possible, but, if not, are packed more tightly in order to reduce to the minimum undesired air space between the particles of crab meat." (*Byrd*, col. 2, ll. 44–48.)

Thus, Byrd does not disclose an ambient air to crabmeat ratio of about 13 to 20 percent by volume. To the contrary, Byrd teaches minimizing the amount of ambient air in the container by, for example, vacuumizing or tightly packing the crabmeat into the container. Therefore, like Doerter, Byrd suggests that ambient air is detrimental to the packaged product and teaches creating the anaerobic environment that the claimed ambient air to crabmeat ratio is intended to avoid, thereby teaching away from the claimed packaged crabmeat product and packaging method.

Air Liquide discloses packaging "non-salted, smoked, filleted, eviscerated whole fish and fresh sea products" in gas-tight plastic wrapping or bulk plastic trays or containers. (*Air Liquide*, abstract.) The packaging is subjected to a vacuum to remove all ambient air and then a gaseous atmosphere, consisting of 60–80 percent by volume CO_2 and 20–40 percent by volume oxygen, is introduced to the packaging. (*Id.*)

The Examiner contends that Air Liquide would direct a person of ordinary skill in the art to leave a minimum amount of air in a packaged crabmeat product. (*Office action mailed September 15, 2009*, pp. 4–5.) This is not correct.

Air Liquide teaches the use of a modified gaseous atmosphere that includes oxygen, wherein the oxygen is present to inhibit anaerobic bacterial growth. (*Declaration of John Keeler, Sr.*, ¶ 22.) However, Air Liquide is directed to packaging fresh fish and sea products.

(*Id.*) The packaged fish and sea products are never subjected to a heat treatment process, such as sterilization or pasteurization. (*Id.*) Therefore, the need for effective and efficient heat transfer is not an issue for the Air Liquide package. (*Id.*) Nor is package bloating and rupture an issue for the Air Liquide package—the package is not heat treated and, therefore, there is no concern about the gases contained in the package expanding. (*Id.*) As such, a person having ordinary skill in the art would not be motivated to apply Air Liquide's teachings regarding packaging fresh fish and sea products to a sealed packaged that undergoes heat treatment. (*Id.* at ¶ 23.)

Thus, Air Liquide does not disclose using ambient air, let alone an ambient air to crabmeat ratio of about 13 to 20 percent by volume. To the contrary, Air Liquide teaches using a modified atmosphere that requires the removal of all ambient air from the package before introducing a modified gaseous atmosphere. As such, Air Liquide teaches away from the claimed packaged crabmeat product and packaging method. Furthermore, Air Liquide's modified atmosphere packaging is not suitable for use with products that undergo heat treatment.

Accordingly, Doerter, Peterson, Byrd and Air Liquide, whether taken alone or in combination, fail to disclose or suggest an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Furthermore, Doerter, Byrd and Air Liquide teach away from an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, the Examiner's rejections hinge on (1) whether Sugisawa discloses or suggests an ambient air to crabmeat ratio of about 13 to 20 percent by volume and (2) whether Sugisawa is properly combinable with Doerter, Peterson, Byrd and Air Liquide.

Sugisawa discloses a process for packaging fish that prevents the formation of drips on the fish. In particular, the process includes the steps of: (1) drying the fish, preferably to 55 to 75 percent by weight water, (2) broiling the dried fish to a specific hardness, preferably 240 to 850 grams, (3) hermetically packaging the broiled fish in a container, and (4) heat sterilizing the packaged container. The hermetically packaging step is preferably a vacuum packaging process "so that the air content is 25% or less, preferably 15% or less, relative to total volume of air and the broiled fish in the container." (*Sugisawa*, col. 3, ll. 9–12.) The vacuum packaging process improves the sterilization effect obtained during the heat

sterilization step and prevents the flow of drips from the fish and the breaking of the fish meat during the heat sterilization step. (*Id.* at col. 3, ll. 12–16.)

Thus, Sugisawa discloses packaging dried, broiled fish (not crabmeat), using a vacuum sealing process to remove as much air as possible (not to an ambient air to crabmeat ratio of about 13 to 20 percent by volume) and sterilizing (not pasteurizing) the sealed product.

Applicant submits that (1) Sugisawa does not disclose or suggest an ambient air to crabmeat ratio of about 13 to 20 percent by volume and (2) a person having ordinary skill in the art would not be motivated to apply the teachings of Sugisawa to crabmeat.

Sugisawa teaches that "[i]t is particularly preferable to conduct vacuum packaging so that the air content is 25% or less, preferably 15% or less, relative to total volume of air and the broiled fish in the container." (*Id.* at col. 3, ll. 9–12.) When read in context, this portion of Sugisawa teaches one skilled in the art that the purpose of vacuum packaging is to improve sterilization. (*Declaration of John Keeler, Sr.*, ¶ 18.)

Sterilization is improved by vacuum packaging because vacuum packaging removes air from the package. (*Id.* at ¶ 19.) Air is an insulator and, therefore, its presence in a package slows the transfer of heat from the surrounding sterilization unit to the fish. (*Id.*) The more air in a package, the longer it takes to heat the fish in the package to the desired sterilization temperature. (*Id.*) Inversely, less air in the package means less insulation, greater heat flux and, consequently, improved sterilization. (*Id.*) The improvement in sterilization effect is directly related to the amount of air removed from the package. (*Id.*)

Thus, a person of ordinary skill in the art reading Sugisawa's teaching that sterilization is improved when the air content in the package "is 25% or less, preferably 15% or less" would be led to remove as much air from the package as possible. (*Id.* at ¶ 20.) Sugisawa provides these values as a tolerance range—a maximum amount of air—not as a calculated minimum amount or air. (*Id.*) Nothing in Sugisawa would direct a person having ordinary skill in the art to intentionally leave a certain minimum amount of air in the package. (*Id.*)

Accordingly, a person having ordinary skill in the art would understand Sugisawa as teaching removing as much air from the package as possible to improve heat transfer during

sterilization—not to intentionally leave a minimum amount of air in the package. As such, Sugisawa does not disclose or suggest an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

On its face, Sugisawa expressly limits its teachings to sterilized, dried, broiled fish. Specifically, Sugisawa states that "[t]he inventors of the present invention have **specifically limited** the food to broiled fish and have concentrated on a technique for increasing the preservative capability thereof by a heat sterilizing treatment." (*Sugisawa*, col. 1, ll. 14–19 (emphasis added).)

Crabmeat is not fish. (*Declaration of John Keeler, Sr.*, ¶ 14.) Crabmeat is harvested from crabs, which are crustaceans (i.e., invertebrate animals with hard exoskeletons and jointed legs). (*Id.*) Fish is meat harvested from fish (i.e., aquatic vertebrates with fins). (*Id.*) While crustaceans are sometimes referred to as "shellfish," the presence of the word "fish" in the word "shellfish" does not render a shellfish a fish. (*Id.*)

The microbiological properties of crabmeat are uniquely different than the microbiological properties of fish. (*Id.* at ¶ 15.) Most notably, crabmeat typically carries a greater concentration and variety of bacterial flora than fish and, therefore, crabmeat spoils easier and quicker than fish. (*Id.*) Furthermore, the texture that typical consumers expect of crabmeat is much different than the texture expected of fish. (*Id.* at ¶ 16.) The typical consumer expects crabmeat to have a soft, delicate texture, a natural color and a sweet taste, which are best preserved by pasteurization. (*Id.*) Fish is expected to be flakey and, therefore, can be sterilized. (*Id.*)

Sterilization is a harsher process than pasteurization and, therefore, is not a desirable heat treatment process for crabmeat. (*Id.*) Specifically, sterilized crabmeat loses its natural texture, color and taste. (*Id.*) As such, sterilized crabmeat is typically infused with various chemical agents to preserve color. However, such chemical agents adversely affect the taste of the treated crabmeat. (*Id.*)

Thus, the packaging considerations for crabmeat are different than the packaging considerations for fish. (*Id.* at ¶ 17.) Furthermore, the considerations for pasteurized crabmeat are different than the considerations for sterilized crabmeat. (*Id.*) Therefore, a person having ordinary skill in the art would not consider the teachings of Sugisawa as

being relevant to the crabmeat packaging industry, let alone to the pasteurized crabmeat packaging industry. (*Id.* at ¶ 13.) As such, a person having ordinary skill in the art would not be motivated to apply the teachings of Sugisawa to crabmeat. (*Id.* at ¶ 17.)

Accordingly, the combination of Doerter, Peterson, Byrd, Air Liquide and Sugisawa fails to disclose or suggest pasteurized crabmeat sealed in a flexible pouch at an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

Furthermore, evidence of commercial success presented during prosecution rebuts the Examiner's contentions of obviousness. On March 12, 2010, Applicant submitted the declaration of John Keeler, Jr., president of John Keeler & Co., Inc., assignee of the present patent application. Mr. Keeler's declaration establishes that BLUE STAR brand pasteurized crabmeat pouches have enjoyed significant commercial success that is primarily attributable to the advantages associated with packaging pasteurized crabmeat at the claimed ambient air to crabmeat ratio. (*Declaration of John Keeler, Jr.*, ¶¶ 6–13.) Indeed, the United States Food and Drug Administration has never detained or rejected any imported BLUE STAR brand pouches due to (1) decomposition as a result of pouch rupture or (2) the presence of botulism (an anaerobic bacteria), thereby confirming not only the commercial success, but the significance, of the claimed package and method. (*Id.* at ¶ 5.)

Accordingly, the Examiner's rejections based on the combination of Doerter, Peterson, Byrd, Air Liquide and Sugisawa should be reversed.

2. Claims 3–5, 7, 10, 12, 13, 15 and 18 are not obvious over the combination of Ueyama, Peterson, Air Liquide and Sugisawa.

The Examiner contends that claims 3–5, 7, 10, 12, 13, 15 and 18 are obvious over the combination of Ueyama, Peterson, Air Liquide and Sugisawa. Peterson, Air Liquide and Sugisawa are discussed in detail above. For the reasons discussed below, Ueyama fails to remedy the shortcomings of Peterson, Air Liquide and Sugisawa. Therefore, the Examiner's rejections should be reversed.

Ueyama discloses a heat-shrinkable multilayer film for packaging, among other things, foods having projections (e.g., crabs), fish meat and other marine products. (*Ueyama*, ¶ 66.) However, Ueyama fails to disclose pasteurization or an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

Significantly, Ueyama teaches a multi-layered film that shrinks when subjected to heat (e.g., hot water at 80 to 90 °C). (*Id.* at ¶ 33.) Therefore, if the teachings of Ueyama were applied to the claimed flexible pouch, the pouch would shrink during the pasteurization process, thereby rendering it difficult, if not impossible, to achieve the desired ambient air to crabmeat ratio of about 13 to 20 percent by volume.

Thus, not only does Ueyama fail to disclose or suggest a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume, Ueyama's shrinking pouch would make it difficult to achieve the claimed ambient air to crabmeat ratio. Therefore, Ueyama fails to remedy the shortcomings of Peterson, Air Liquide and Sugisawa addressed above.

Accordingly, the Examiner's rejections based on the combination of Ueyama, Peterson, Air Liquide and Sugisawa should be reversed.

3. Claims 3–5, 7, 10, 12, 13, 15 and 18 are not obvious over the combination of Lett, Peterson, Air Liquide, Doerter and Sugisawa.

The Examiner contends that claims 3–5, 7, 10, 12, 13, 15 and 18 are obvious over the combination of Lett, Peterson, Air Liquide, Doerter and Sugisawa. Peterson, Air Liquide, Doerter and Sugisawa are discussed in detail above. For the reasons discussed below, Lett fails to remedy the shortcomings of Peterson, Air Liquide, Doerter and Sugisawa. Therefore, the Examiner's rejections should be reversed.

Lett discloses a method for packaging crab including the steps of: (1) optionally wrapping the crab in parchment, (2) placing the crab in a pouch of plastics material, (3) adding brine to the pouch, (4) vacuum sealing, and (5) pasteurizing the sealed pouch. (*Lett*, p. 11.) However, Lett does not disclose an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

To the contrary, Lett teaches packing crab (whole crab) in a plastic pouch that has been filled with brine and has been vacuum sealed to remove air. Therefore, Lett expressly teaches the removal of air from the package, thereby suggesting that air is detrimental to the final product.

Thus, not only does Lett fail to disclose or suggest a packaged crabmeat product having an ambient air to crabmeat ratio of about 13 to 20 percent by volume, let teaches

away from an ambient air to crabmeat ratio of about 13 to 20 percent by volume. Therefore, Lett fails to remedy the shortcomings of Peterson, Air Liquide, Doerter and Sugisawa addressed above.

Accordingly, the Examiner's rejections based on the combination of Lett, Peterson, Air Liquide, Doerter and Sugisawa should be reversed.

4. Claims 3–5, 7, 10, 12, 13, 15 and 18 are not obvious over the combination of Walker, Ueyama and Sugisawa

The Examiner contends that claims 3–5, 7, 10, 12, 13, 15 and 18 are obvious over the combination of Walker, Ueyama and Sugisawa. Ueyama and Sugisawa are discussed above. For the reasons discussed below, Walker fails to remedy the shortcomings of Ueyama and Sugisawa. Therefore, the Examiner's rejections should be reversed.

Walker discloses a method for preserving shellfish, such as crab, by (1) partially cooking the crab to remove the meat, (2) dipping the cooked meat into a chlorine solution, (3) impregnating the cooked meat with an aqueous solution of an inorganic chloride (e.g., sodium chloride), an antibacterial agent (e.g., sodium nitrate), and an organic acid (e.g., citric acid), (4) placing the impregnated meat into a container, (5) pasteurizing the impregnated meat and (6) sealing the container.

Walker does not disclose an ambient air to crabmeat ratio of about 13 to 20 percent by volume. To the contrary, Walker teaches impregnating shellfish meat with an aqueous solution having a bacteriostatic effect (col. 3, 11. 39-41), thereby obviating the need for an ambient air to crabmeat ratio of 13 to 20 percent by volume.

Thus, Walker fails to remedy the shortcomings of Ueyama and Sugisawa addressed above. As such, the Examiner's rejections based on the combination of Walker, Ueyama and Sugisawa should be reversed.

Conclusion:

For the foregoing reasons, the Examiner has failed to establish that claims 3–5, 7, 10, 12, 13, 15 and 18 are obvious. As such, the Examiner's rejections should be reversed.

Respectfully submitted,

/Victor J Wasylyna/

June 21, 2011

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CLAIMS APPENDIX

3. The method of claim 18 wherein said flexible pouch is comprised of a multi-layered film.

4. The method of claim 3 wherein said multi-layered film comprises:

at least one layer of polyethylene terephthalate;

at least one layer of nylon;

at least one layer of aluminum; and

at least one layer of cast polypropylene.

5. The method of claim 18 wherein said sealing step includes the use of a partial vacuum.

7. The method of claim 18 wherein said air to crabmeat ratio is about 20% by volume.

10. A packaged crabmeat product comprising:

a sealed flexible pouch;

a volume of crabmeat positioned in said sealed flexible pouch; and

a volume of ambient air positioned in said sealed flexible pouch, said volume of ambient air providing an ambient air to crabmeat ratio within said sealed flexible pouch of about 13–20% by volume such that anaerobic bacterial growth is prevented, wherein said sealed flexible pouch is pasteurized.

12. The packaged crabmeat product of claim 10 wherein said flexible pouch is comprised of a multi-layered film.

13. (Original) The packaged crabmeat product of claim 12 wherein said multi-layered film comprises:

at least one layer of polyethylene terephthalate;

at least one layer of nylon;

at least one layer of aluminum; and

at least one layer of cast polypropylene.

15. The packaged crabmeat product of claim 10 wherein said air to crabmeat ratio is about 20% by volume.

18. A method for packaging crabmeat comprising the steps of:

providing a flexible pouch;

placing a volume of crabmeat into said flexible pouch;

after said crabmeat has been placed into said flexible pouch, controlling a volume of ambient air in said flexible pouch to obtain an ambient air to crabmeat ratio within said flexible pouch of about 13–20% by volume such that anaerobic bacterial growth within said flexible pouch is prevented;

sealing said flexible pouch to maintain said ambient air to crabmeat ratio within said flexible pouch; and

after said sealing step, pasteurizing said flexible pouch.

EVIDENCE APPENDIX

1. Declaration on John Keeler, Sr. under 37 C.F.R. § 1.132. (filed on July 6, 2009).

2. Declaration on John Keeler, Jr. under 37 C.F.R. § 1.132. (filed on March 12, 2010).

1. Declaration of John Keeler, Sr.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Applicant	:	Keeler, Sr.
Serial No.	:	10/691,480
Filed	:	October 21, 2003
Title	:	METHOD FOR PACKAGING CRABMEAT
Docket	:	424532-00002
Examiner	:	Jyoti Chawla
Art Unit	:	1761

Commissioner for Patents
Post Office Box 1450
Alexandria, Virginia 22313-1450

DECLARATION OF JOHN KEELER, SR. UNDER 37 C.F.R. § 1.132

I, John Keeler, Sr., declare and state:

1. I am the inventor of the above-identified patent application.

2. I am no longer employed by the assignee, John Keeler & Co., Inc. (d/b/a/ Blue Star Food Products).

3. I have a Bachelors of Science degree in Industrial Engineering and a Masters of Science degree in Chemical Engineering.

4. I have worked in the crabmeat packaging industry for over 17 years. My work in the crabmeat packaging industry has focused primarily on quality assurance and regulatory compliance issues.

5. I have read and understand the contents of the above-identified patent application, which claims a packaged crabmeat product and related method for packaging crabmeat. I am particularly familiar with pending claims 3-5, 7, 10, 12, 13, 15 and 18. Claim 10 reads as follows:

> A packaged crabmeat product comprising:

> a flexible pouch;
>
> a volume of crabmeat placed into said flexible pouch; and
>
> a volume of ambient air within said flexible pouch, said volume of ambient air providing an ambient air to crabmeat ratio within said flexible pouch of about 13-20% by volume such that anaerobic bacterial growth is prevented, wherein said flexible pouch is sealed and pasteurized.

6. Each claim of the pending application requires, among other things, an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

7. I have read and understand the Office action dated October 4, 2007 in which claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) U.S. Patent No. 5,268,189 to Doerter (herein "Doerter"), (2) Peterson, M. E., G. A. Pelroy, F. T. Poysky, R. N. Paranjpye, F. M. Dong, G. M. Pigott and M. W. Eklund. "Heat-Pasteurization Process for Inactivation of Nonproteolytic Types of Clostridium botulinum in Picked Dungeness Crabmeat." *Journal of Food Protection* 60(8) (1997): 928-934 (herein "Peterson"), (3) U.S. Patent No. 2,546,428 to Byrd (herein "Byrd"), (4) Air Liquide Canada, "Packaging and Preserving Fish and Sea Products" (Abstract Only) (herein "Air Liquide") and (5) U.S. Patent No. 4,840,805 to Sugisawa et al. (herein "Sugisawa"), claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) U.S. Patent Pub. No. 2002/0061412 to Ueyama et al. (herein "Ueyama"), (2) Peterson, (3) Air Liquide and (4) Sugisawa, claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) GB 2,343,611 to Lett et al. (herein "Lett"), (2) Peterson, (3) Air Liquide, (4) Doerter and (5) Sugisawa, and claims 3-5, 7, 10, 12, 13, 15 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of (1) U.S. Patent No. 3,852,486 to Walker et al. (herein "Walker"), (2) Ueyama and (3) Sugisawa.

8. I have read and understand the decision of the Board of Patent Appeals and Interferences dated May 6, 2009 in which all rejections in the Office action dated October 4, 2007 were affirmed.

9. In making the rejections, the Office notes that Sugisawa teaches:

> When the broiled fish is to be hermetically packaged in the container, the broiled fish is placed in the container which is then sealed at suitable positions by heat sealing or adhesion. It is preferable that the broiled fish be packaged in the container under vacuum from the viewpoint of improving the sterilization effect during the heat sterilization. It is particularly preferable to conduct vacuum packaging so that the air content is 25% or less, preferably 15% or less, relative to total volume of air and the broiled fish in the container, because the sterilization effect obtained during the heat sterilization is improved, and the effect of preventing the flow of drips from the fish and the breaking of the fish meat during the heat sterilization is also improved.

(Sugisawa, col. 3, ll. 3-16.)

10. Thus, the Office contends that it would have been obvious to modify a flexible pouch containing crabmeat, as taught by Peterson, to include ambient air and crabmeat at an ambient air to crabmeat ratio of about 13 to 20 percent by volume based upon the teachings of Sugisawa.

11. For at least the following reasons, the teachings of Sugisawa would not lead a person having ordinary skill in the art to modify a flexible pouch containing pasteurized crabmeat to include ambient air, let alone an ambient air to crabmeat ratio of about 13 to 20 percent by volume.

12. Sugisawa's teachings are limited to packaging sterilized, dried, broiled fish. Specifically, Sugisawa expressly states that "[t]he inventors of the present invention have *specifically limited* the food to broiled fish and have concentrated on a technique for increasing the preservative capability thereof by a heat sterilizing treatment."

(Col. 1, ll. 14-19 (emphasis added).) Therefore, on its face, Sugisawa's teachings are limited to sterilized broiled fish.

13. A person skilled in the art would not consider the teachings of Sugisawa to be relevant to the crabmeat packaging industry, certainly not to the pasteurized crabmeat packaging industry. Sugisawa is directed to a different field of endeavor – the packaging of sterilized, dried, broiled fish.

14. Crabmeat is not fish. Crabmeat is harvested from crabs, which are crustaceans, i.e., invertebrate animals with hard exoskeletons and jointed legs. Fish is meat harvested from fish, i.e., aquatic vertebrates with fins. While crustaceans are sometimes referred to as "shellfish," the presence of the word "fish" in the word "shellfish" does not render a shellfish a fish – as indicated above, fish are vertebrates with fins.

15. The microbiological properties of crabmeat are uniquely different than the microbiological properties of fish. Most notably, crabmeat typically carries a greater concentration and variety of bacterial flora than fish and, therefore, crabmeat spoils easier and quicker than fish.

16. Furthermore, the texture that typical consumers expect of crabmeat is much different than the texture expected of fish. The typical consumer expects crabmeat to have a soft, delicate texture, a natural color and a sweet taste, which are best preserved by pasteurization. Fish is expected to be flakey and, therefore, can be sterilized. Sterilization is a harsher process than pasteurization and, therefore, is not a desirable heat treatment process for crabmeat. Specifically, sterilized crabmeat loses its natural texture, color and taste. As such, sterilized crabmeat is typically infused with various chemical agents to preserve color. However, such chemical agents adversely affect the taste of the treated crabmeat.

17. Thus, the packaging considerations for crabmeat are different than the packaging considerations for fish. Furthermore, the considerations for pasteurized crabmeat are different than the considerations for sterilized crabmeat. A person having ordinary

skill in the art would not be inclined to modify a flexible pouch containing pasteurized crabmeat based upon Sugisawa's teachings regarding sterilized fish.

18. Sugisawa teaches that "[i]t is particularly preferable to conduct vacuum packaging so that the air content is 25% or less, preferably 15% or less, relative to total volume of air and the broiled fish in the container." (Sugisawa, col. 3, ll. 9-12.) When read in context, this portion of Sugisawa instructs the reader to remove air from the package to improve "the sterilization effect." (Col. 3, l. 8.) Therefore, Sugisawa teaches that vacuum packaging may be used to improve sterilization.

19. Sterilization is improved by vacuum packaging because vacuum packaging removes air from the package. Air is an insulator – it slows the transfer of heat to the fish from the surrounding sterilization unit. The more air in a package, the longer it takes to heat the fish in the package to the desired sterilization temperature. Inversely, less air in the package means less insulation, greater heat flux and, consequently, improved sterilization. The improvement in sterilization effect is directly related to the amount of air removed from the package.

20. A person of ordinary skill in the art reading Sugisawa's teaching that sterilization is improved when the air content in the package "is 25% or less, preferably 15% or less" would be led to remove as much air from the package as possible. Sugisawa provides these values as a tolerance range, i.e., a maximum amount of air, not as a calculated minimum amount or air. Nothing in Sugisawa would direct a person having ordinary skill in the art to intentionally leave a certain minimum quantity of air in the package.

21. The Office also contends that Air Liquide would direct a person of ordinary skill in the art to leave a minimum amount of air in Sugisawa's package. This is not correct.

22. Air Liquide teaches the use of a modified gaseous atmosphere that includes oxygen, wherein the oxygen is present to inhibit anaerobic bacterial growth. However, Air Liquide is directed to packaging fresh fish and sea products. The packaged fish and sea products are never subjected to a heat treatment process, such as sterilization or pasteurization. Therefore, the need for effective and efficient heat transfer is not an

issue for the Air Liquide package. Nor is package bloating and rupture an issue for the Air Liquide package – the package is not heat treated and, therefore, there is no concern about the gases contained in the package expanding.

23. Therefore, a person having ordinary skill in the art would not be motivated to combine Air Liquide's teachings regarding packaging fresh fish and sea products with Sugisawa's teachings regarding sterilized, dried, broiled fish.

24. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

FURTHER DECLARANT SAYETH NAUGHT.

Signed: _____
John Keeler, Sr.

Date: June 30th, 2009

578374

2. Declaration of John Keeler, Jr.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Applicant	:	Keeler, Sr.
Serial No.	:	10/691,480
Filed	:	October 21, 2003
Title	:	METHOD FOR PACKAGING CRABMEAT
Docket	:	424532-00002
Examiner	:	Jyoti Chawla
Art Unit	:	1761

Commissioner for Patents
Post Office Box 1450
Alexandria, Virginia 22313-1450

DECLARATION OF JOHN KEELER, JR. UNDER 37 C.F.R. § 1.132

I, John Keeler, Jr., declare and state:

1. I am the president of John Keeler & Co., Inc., the assignee of the above-identified patent application (the "Application"). I began working in the crabmeat packaging industry in 1992 and, therefore, have about 18 years of experience in the industry.

2. The pending claims of the Application are directed to a sealed and pasteurized flexible pouch that contains crabmeat and ambient air. The amount of ambient air in the flexible pouch is controlled to provide an ambient air-to-crabmeat ratio of about 13 to 20 percent by volume. This specific ambient air-to-crabmeat ratio provides the sealed, pasteurized flexible pouch with at least two advantages. As a first advantage, the controlled amount of air minimizes swelling of the flexible pouch, and the resulting risk of pouch rupture, during the pasteurization step. As a second advantage, the controlled amount of ambient air inhibits undetectable anaerobic bacterial growth, while permitting spoilage (aerobic) bacterial growth.

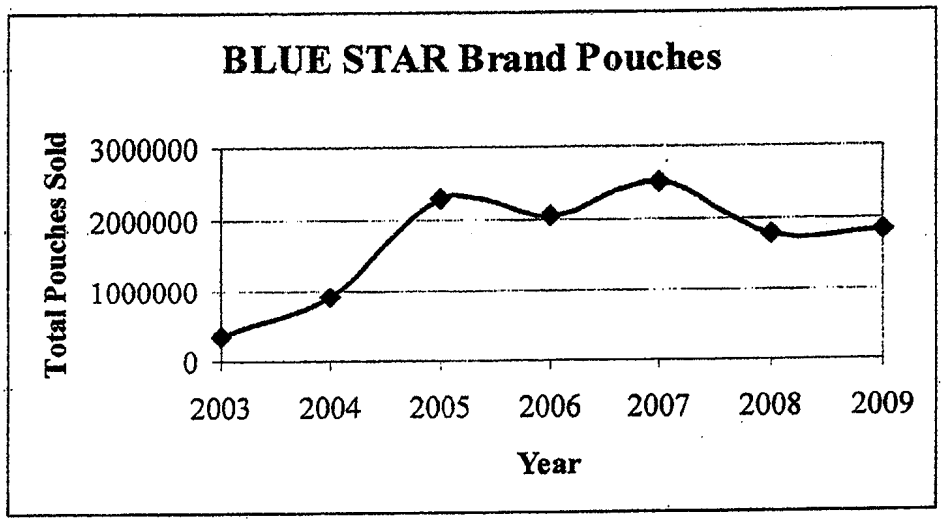
3. Thus, due to the claimed ambient air-to-crabmeat ratio, the flexible pouches may be pasteurized with minimized risk of deformation and rupture, while finished pouches

that have been subjected to temperature abuse may be detected by the swelling and odor associated with spoilage bacterial growth.

4. John Keeler & Co., Inc. has been selling pouches of pasteurized crabmeat under the BLUE STAR brand since 2003. The BLUE STAR brand pouches fall within the scope of at least one pending claim of the Application, including claim 10. To my knowledge, no other patents or pending patent applications cover the BLUE STAR brand pouches.

5. The BLUE STAR brand pouches are imported into the United States. To date, the United States Food and Drug Administration has never detained or rejected any imported BLUE STAR brand pouches due to (1) decomposition as a result of a pouch rupture or (2) the presence of botulism (anaerobic bacteria).

6. The BLUE STAR brand pouches have enjoyed commercial success from their debut in 2003 to the present day. Specifically, as shown in the graph below, 356,232 pouches were sold in 2003; 910,027 pouches were sold in 2004; 2,306,278 pouches were sold in 2005; 2,070,383 pouches were sold in 2006; 2,516,229 were sold in 2007; 1,800,327 pouches were sold in 2008; and 1,851,502 pouches were sold in 2009.



7. Therefore, sales of the BLUE STAR brand pouches grew rapidly from their introduction in 2003 through 2007, and sales remained steady but strong in 2008 and 2009, despite the economic recession.

8. The commercial success of the BLUE STAR brand pouches was not the result of heavy advertising or promotion, or a shift in advertising strategy. To the contrary, the advertising budgets versus gross revenue for the BLUE STAR brand pouches were relatively low compared to industry norms. Specifically, the advertising budgets for the BLUE STAR pouches were $58,753 in 2003; $53,583 in 2004; $63,228 in 2005; $29,398 in 2006; $21,442 in 2007; $24,068 in 2008; and $16,671 in 2009.

9. John Keeler & Co., Inc. primarily sells the BLUE STAR brand pouches to distributors, such as Wal-Mart, which ultimately sell the pouches directly to the end consumer. These distributors are not obligated to purchase the BLUE STAR brand pouches, but rather are free to purchase pasteurized crabmeat products from competitors of John Keeler & Co., Inc. A variety of pasteurized crabmeat products from a variety of different suppliers have been & are currently available on the market.

10. John Keeler & Co., Inc.'s primary competitor in the pasteurized crabmeat industry is S.B. Phillips, LLC, which sells pasteurized crabmeat under the PHILLIPS brand. I estimate that John Keeler & Co., Inc. is currently second to S.B. Phillips, LLC in U.S. market share for pasteurized crabmeat. Therefore, the success of the BLUE STAR brand pouches cannot be attributed to a dominant market position.

11. Prior to commercially launching the BLUE STAR brand pouches, I estimate that John Keeler & Co., Inc. was fifth in U.S. market share for pasteurized crabmeat. I attribute John Keeler & Co., Inc.'s gain in market share to the commercial launch and success of the BLUE STAR brand pouches.

12. To my knowledge, the use of flexible pouches for packaging pasteurized crabmeat was first disclosed in 1997 by Peterson, M. E., G. A. Pelroy, F. T. Poysky, R. N. Paranjpye, F. M. Dong, G. M. Pigott and M. W. Eklund. "Heat-Pasteurization Process

for Inactivation of Nonproteolytic Types of Clostridium botulinum in Picked Dungeness Crabmeat." *Journal of Food Protection* 60(8) (1997): 928-934 (the "Peterson reference"). However, the Peterson reference does not disclose sealing crabmeat and ambient air in a flexible pouch at an ambient air-to-crabmeat ratio of about 13 to 20 percent by volume. Therefore, the flexible pouches disclosed in the Peterson reference lacked the advantages associated with the claimed ambient air-to-crabmeat ratio. Nor did the flexible pouches disclosed in the Peterson reference lead to a commercial product. To my knowledge, the BLUE STAR brand pouches were the first commercially available flexible pouches packed with pasteurized crabmeat.

13. For the foregoing reasons, the commercial success of the BLUE STAR brand pouches is primarily attributable to the advantages associated with the use of flexible pouches having a controlled amount of ambient air to achieve an ambient air-to-crabmeat ratio of 13 to 20 percent by volume, and not to other economic and commercial factors unrelated to the subject matter of the pending claims of the Application.

14. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

FURTHER DECLARANT SAYETH NAUGHT.

Signed: _____
John Keeler, Jr.

Date: March 11th, 2010

607240

RELATED PROCEEDINGS APPENDIX

1. Decision of the Board of Patent Appeals and Interferences in Appeal No. 2009-1587 (decided on May 6, 2009).

1. Decision of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,480	10/21/2003	John Keeler SR.	424532-002	5040

27805 7590 05/06/2009

THOMPSON HINE L.L.P.
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EXAMINER	
CHAWLA, JYOTI	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
05/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN KEELER SR.

Appeal 2009-1587
Application 10/691,480
Technology Center 1700

Decided:[1] May 06, 2009

Before CHUNG K. PAK, TERRY J. OWENS, and
BEVERLY A. FRANKLIN, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's

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[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

rejection of claims 3-5, 7, 10, 12, 13, 15 and 18, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

The Invention

The Appellant claims a packaged crabmeat product and a method for making it. Claim 10 is illustrative:

10. A packaged crabmeat product comprising:

a flexible pouch;

a volume of crabmeat placed into said flexible pouch; and

a volume of ambient air within said flexible pouch, said volume of ambient air providing an ambient air to crabmeat ratio within said flexible pouch of about 13-20% by volume such that anaerobic bacterial growth is prevented, wherein said flexible pouch is sealed and pasteurized.

The References

Byrd	2,546,428	Mar. 27, 1951
Walker	3,852,486	Dec. 3, 1974
Sugisawa	4,840,805	Jun. 20, 1989
Doerter	5,268,189	Dec. 7, 1993
Ueyama	2002/0061412 A1	May 23, 2002
Lett	GB 2,343,611 A	May 17, 2000

Nicol et al., "Preserving Fish and Sea Products", *Research Disclosure J.* 23512 (Nov. 1983) (hereafter "L'Air Liquide").

Peterson et al., "Heat-Pasteurization Process for Inactivation of Nonproteolytic Types of *Clostridium botulinum* in Picked Dungeness Crabmeat", 60 *J. Food Protection* 928-34 (1997).

The Rejections

Claims 3-5, 7, 10, 12, 13, 15 and 18 stand rejected under 35 U.S.C. § 103 over 1) Doerter in view of Peterson, Byrd, L'Air Liquide,

and Sugisawa,[2] 2) Ueyama in view of Peterson, L'Air Liquide, and Sugisawa, 3) Lett in view of Peterson, L'Air Liquide, Doerter, and Sugisawa, and 4) Walker in view of Ueyama and Sugisawa.

OPINION

We affirm the Examiner's rejections.

Issue

Has the Appellant shown reversible error in the Examiner's determination that the applied prior art would have rendered prima facie obvious, to one of ordinary skill in the art, a pasteurized pouch containing ambient air and crabmeat in an ambient air to crabmeat ratio of about 13-20% by volume?

Findings of Fact

Sugisawa discloses a container, which can be a plastic pouch, containing broiled dried fish (col. 1, ll. 7-8, 47-48; col. 3, ll. 63-65; col. 4, ll. 18-20, 31-34). The dried fish "is obtained by the drying treatment of any kind of fish, for example, sardine, horse mackerel, pacific saury, mackerel, salmon, yellowtail, spanish mackerel, herring, eel, conger eel, flatfish, sea bream, or pollack" (col. 1, l. 65 – col. 2, l. 1). "The dried fish or broiled fish may have any form, such as complete fish (including an eviscerated fish) or a slice obtained by cutting the fish in a suitable manner (half fish or fish fillet)" (col. 2, ll. 46-49). Sugisawa teaches (col. 3, ll. 3-16):

> When the broiled fish is to be hermetically packaged in the container, the broiled fish is placed in the container which is then sealed at suitable positions by heat sealing or adhesion. It is preferable that the broiled fish be packaged in the container under

[2] Our consideration of Peterson and L'Air Liquide is based upon the full Peterson and L'Air Liquide documents in the application file.

> vacuum from the viewpoint of improving the sterilization effect during the heat sterilization. It is particularly preferable to conduct vacuum packaging so that the air content is 25% or less, preferably 15% or less, relative to total volume of air and the broiled fish in the container, because the sterilization effect obtained during the heat sterilization is improved, and the effect of preventing the flow of drips from the fish and the breaking of the fish meat during the heat sterilization is also improved.

Sugisawa sterilizes the broiled fish at 75-130°C for about 5 to 60 minutes (col. 3, ll. 24-31).

Lett pasteurizes crabs at 80-100°C for 90 ± 5 minutes (p. 4, ll. 8-11).

Peterson pasteurizes crabs for times ranging from 20.3 min. at 94.4°C to 90 min. at 88.9°C, and teaches that pasteurization extends refrigerated shelf life by inactivating spores of *Clostridium botulinum* nonproteolytic types B, E, and F and non-spore-forming pathogens such as *Listeria monocytogenes*, but does not inactivate heat-resistant proteolytic strains of *Clostridium botulinum* or other more heat-resistant spore formers (abstract).

L'Air Liquide teaches that packaging whole fish and fresh sea products under gaseous atmospheres rich in carbon dioxide and containing an amount of oxygen such as 20 vol.% inhibits, due to the carbon dioxide, the growth of many germs and avoids, due to the oxygen, the development of strict anaerobic flora, particularly *Clostridium botulinum* (p. 23512).

Ueyama sterilizes both crabs and other marine products (¶¶ 0039, 0066).

Doerter (col. 2, ll. 23-24), Byrd (col. 1, ll. 7-8) and Walker (col. 2, ll. 44-45) teach that crabs are shellfish.

Analysis

The Appellant argues that Sugisawa's disclosure of vacuum packaging at an air content of 25% or less, preferably 15% or less (col. 3, ll. 10-11), "suggests only that Sugisawa et al.'s patent attorney did not want to limit the invention to a true vacuum – not that some amount of air is advantageous" (Br. 12).

That argument is not persuasive because it is unsupported by evidence. Arguments of counsel cannot take the place of evidence. *See In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); *In re Payne*, 606 F.2d 303, 315 (CCPA 1979); *In re Greenfield*, 571 F.2d 1185, 1189 (CCPA 1978); *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974). Although Sugisawa does not disclose that the presence of some amount of air is advantageous relative to a vacuum, Sugisawa discloses that the benefit of improving sterilization effects is obtained at an air content as high as 25 vol.% (col. 3, ll. 9-14).

The Appellant argues that Sugisawa discloses packing broiled dried fish, not crabmeat (Br. 12).

Sugisawa teaches that the fish can be any kind of fish (col. 1, ll. 65-66). As indicated by Doerter (col. 2, ll. 23-24), Byrd (col. 1, ll. 7-8) and Walker (col. 2, ll. 44-45), crabs are shellfish. Also, the record indicates that the problem of aerobic and anaerobic spore growth is a characteristic of both crabs and non-shell fish. For example, L'Air Liquide packages whole fish and fresh sea products in an atmosphere containing an amount of oxygen such as 20 vol.% to avoid the development of strict anaerobic flora, particularly *Clostridium botulinum* (p. 23512), and Ueyama sterilizes both crabs and other marine products (¶¶ 0039, 0066). Also, Peterson teaches

that pasteurizing crabs extends refrigerated shelf life by inactivating spores of *Clostridium botulinum* nonproteolytic types B, E and F and non-spore-forming pathogens such as *Listeria monocytogens* (abstract). Hence, the record indicates that one of ordinary skill in the art, through no more than ordinary creativity, would have applied Sugisawa's disclosure to crabmeat. *See KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (In making an obviousness determination one "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ").

The Appellant argues that Sugisawa discloses heat sterilization, not pasteurization (Br. 13).

As indicated by the similarity of Sugisawa's sterilization conditions (75-130°C for about 5 to 60 minutes (col. 3, ll. 24-31)) and the pasteurization conditions of Lett (80-100°C for 90 ± 5 minutes (p. 4, ll. 8-11)) and Peterson (20.3 min. at 94.4°C to 90 min. at 88.9°C (abstract)), one of ordinary skill in the art would have expected pasteurization to provide an effect similar to Sugisawa's sterilization. Hence, one of ordinary skill in the art, through no more than ordinary creativity, would have used pasteurization as an alternative to Sugisawa's sterilization. *See KSR*, 550 U.S. at 418.

The Appellant argues that Sugisawa "fails to teach an ambient air to crabmeat ratio within a range of about 13 to 20 percent by volume" (Br. 14).

Sugisawa's range of less than 25 vol.% air (33% or less air:fish ratio) (col. 3, ll. 10-11) encompasses the Appellant's range and, therefore, would have rendered the Appellant's air contents prima facie obvious to one of ordinary skill in the art. Sugisawa's preferred range of less than 15 vol.% air (18% or less air:fish ratio) (col. 3, l. 11) overlaps the Appellant's range. Use

of amounts within the overlapping range would have been prima facie obvious to one of ordinary skill in the art. *See In re Malagari*, 499 F.2d 1297, 1303 (CCPA 1974).

The Appellant argues that Sugisawa "does not disclose that a certain minimum amount of air in the package can be advantageous" (Reply Br. 4).

For a prima facie case of obviousness to be established, the applied prior art need not recognize a particular advantage recognized by the Appellant. *See Ex parte Obiaya*, 227 USPQ 58, 60 (BPAI 1985) ("The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious"). Moreover, L'Air Liquide would have indicated to one of ordinary skill in the art that Sugisawa's air provides the Appellant's recognized benefit of avoiding development of anaerobic spores (Appellant's Spec. ¶ 10; L'Air Liquide p. 23512).

The Appellant argues that one of ordinary skill in the art would not reasonably have expected that combining the references would produce the claimed invention (Br. 14-15).

That reasonable expectation would have been provided by the references as discussed above.

The Appellant argues that the Appellant's invention produces unexpected results (Br. 15).

That argument is not well taken because the Appellants have not provided a side-by-side comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims, and explained why the results would have been unexpected by one of ordinary skill in the

art. *See In re Baxter Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991); *In re De Blauwe*, 736 F.2d at 705; *In re Grasselli*, 713 F.2d 731, 743 (Fed. Cir. 1983); *In re Clemens*, 622 F.2d 1029, 1035 (CCPA 1980); *In re Freeman*, 474 F.2d 1318, 1324 (CCPA 1973); *In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972). The attorney argument provided by the Appellant cannot take the place of evidence. *See De Blauwe*, 736 F.2d at 705; *Payne*, 606 F.2d at 315; *Greenfield*, 571 F.2d at 1189; *Pearson*, 494 F.2d at 1405.

Conclusion of Law

The Appellant has not shown reversible error in the Examiner's determination that the applied prior art would have rendered prima facie obvious, to one of ordinary skill in the art, a pasteurized pouch containing ambient air and crabmeat in an ambient air to crabmeat ratio of about 13-20% by volume.

DECISION/ORDER

The rejections of claims 3-5, 7, 10, 12, 13, 15 and 18 under 35 U.S.C. § 103 over 1) Doerter in view of Peterson, Byrd, L'Air Liquide and Sugisawa, 2) Ueyama in view of Peterson, L'Air Liquide and Sugisawa, 3) Lett in view of Peterson, L'Air Liquide, Doerter and Sugisawa, and 4) Walker in view of Ueyama and Sugisawa are affirmed.

It is ordered that the Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

ssl

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CERTIFICATE OF EFS-WEB TRANSMISSION

I hereby certify that this correspondence is being transmitted to the United States Patent and Trademark Office by way of the EFS-WEB electronic filing system on June 21, 2011:

/Victor J Wasylyna/

Victor J. Wasylyna